

Claims

- 1 1. A support structure for a mobile communications device comprising a
2 dampening mechanism to dampen the insertion of the mobile
3 communications device into the support structure wherein the dampening
4 mechanism comprises a geared arrangement to control the speed of insertion
5 of the mobile communications device into the support structure.
- 1 2. A support structure as claimed in claim 1, wherein the support structure
2 comprises a data/power connection means and the support structure is
3 arranged such that the geared arrangement controls the speed of
4 mating/withdrawal of the data/power connections means with a respective
5 data/power connection means of a mobile communications device.
- 1 3. A support structure as claimed in claim 1, wherein the support structure
2 extends in the vertical plane to support the mobile communications device in
3 an upright configuration.
- 1 4. A support structure as claimed in claim 1, wherein the support structure
2 comprises a data/power connection means and wherein the support structure
3 is arranged such that the geared arrangement guides the mating/withdrawal
4 of the respective connection means.
- 1 5. A support structure as claimed in claim 1, wherein the support structure
2 comprises a platform arranged to engage with mobile communications device
3 and move into/out of the support structure, and wherein the geared
4 arrangement is arranged to control the in/out movement of the platform.
- 1 6. A support structure as claimed in claim 5, wherein the support structure
2 is arranged to allow the insertion of the whole of the platform into the support
3 structure.
- 1 7. A support structure as claimed in claim 5, wherein the platform is
2 arranged to protect the data/power connection means.

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1 8. A support structure as claimed in claim 7, wherein the support structure
2 comprises data/power connection means located proximal to the platform to
3 allow controlled mating between respective connection means upon insertion
4 of the platform into the support structure.

1 9. A support structure as claimed in claim 8, wherein the connection
2 means is contained within the support structure housing to allow access by
3 the connection means of a mobile communications device when the mobile
4 communications device is appropriately positioned on the platform, and the
5 platform comprises an orifice into the housing to allow mating of the
6 connection means of the mobile communications device with the support
7 structure connection means.

1 10. A support structure as claimed in claim 9, wherein the platform is
2 arranged to support the base of a mobile communications device.

1 11. A support structure for a mobile communications device comprising a
2 dampening mechanism to dampen the insertion of the mobile
3 communications device into the support structure wherein the dampening
4 mechanism comprises a geared arrangement to control the speed of insertion
5 of the mobile communications device into the support structure, and wherein
6 the geared arrangement comprises a rack arranged to engage with a gear
7 wheel to allow controlled translational movement of the dampening
8 mechanism.

1 12. A support structure as claimed in claim 11, wherein the platform
2 comprises the rack arranged to engage with a gear wheel attached to a fixed
3 position on the support structure.

1 13. A support structure as claimed in claim 11, wherein movement of the
2 platform is arranged to be guided by guide pins.

1 14. A support structure as claimed in claim 13, wherein the support
2 structure comprises one or more channels arranged to house a guide pin.

1 15. A support structure as claimed claim 14, wherein the platform is
2 arranged to be biased between the in and out positions by biasing means.

1 16. A support structure as claimed in claim 13, wherein one or more of the
2 guide pins are encircled by one or more springs.

1 17. A support structure as claimed in claim 16, wherein the biasing means
2 comprises one or more springs.

1 18. A support structure as claimed in claim 16, wherein the biasing means
2 comprises one or more flexible lugs arranged to flex upon compression to
3 store up compressive energy which is subsequently released by deflexion.